

REMARKS

Claims 1-10, 12-14, 16-28, 35-46, 48-50, 52-64, and 71-72 remain pending in the application. The independent claims are claim 1, reciting a computer-readable medium storing a computer application workspace generation and navigation tool, and claim 37 reciting a corresponding method. Claims 1-37 have been amended herein for the reasons set forth below.

Favorable reconsideration is requested in view of the claim amendments and following remarks.

I. OVERVIEW OF THE CLAIM AMENDMENTS

A. Statutory Subject Matter

During the interview, the Examiner raised the issue of whether the claims are worded in a manner that captures one of the categories of permissible statutory subject matter pursuant to 35 U.S.C. § 101, particularly in view of the recent decision in *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (Fed. Cir. 2008). In view of the Examiner's comments, claims 1-36 have been amended to recite a "computer-readable medium storing a computer application workspace generation and navigation tool." By reciting a specifically configured "computer-readable medium", claims 1-36 are properly interpreted as falling within the apparatus statutory class.

Regarding the method claims, method claims are proper under *Bilski* if they (1) are tied to another statutory subject matter, or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. A transformed "article" may include electronically manipulated data. *Bilski*, 545 F.3d at 943. Although only one requirement need be met, the method claims in this case satisfy both. Independent claim 37 has been amended to recite a "method of generating a computer application workspace by executing a program stored on a computer-readable medium." The claim is thus tied to another statutory class insofar as a configured computer-readable medium meets the criteria of, and is an apparatus. In addition, the claim recites a transformation of subject matter (electronically manipulated data). The method includes

generating a logical application workspace, and receiving a user input that transforms the workspace by altering which portion of the logical workspace is displayed in the viewable work area.

For at least these reasons, the claims recite proper statutory subject matter pursuant to 35 U.S.C. § 101.

B. Configuration of the Claimed Screens

During the interview, Applicant explained distinctive features of the invention associated with the configuration of the claimed “screens”. The Examiner expressed concern that such features were not adequately recited in the claims. In accordance with the Examiner’s comments, independent claims 1 and 37 have been amended to clarify the configuration of the claimed screens.

First, claims 1 and 37 have been amended to recite: “each logical screen has predetermined dimensions that are ~~generally~~ coextensive with the physically viewable work area defined by the main computer application such that each screen has dimensions that are the same as every other screen.” As stated in the application, “the size of each screen 56 . . . is generally coextensive with the viewable area 55 defined by the frame 46.” (Paragraph [0040].) Such screen dimensions are also depicted specifically in Fig. 3, with screen 56f being shown as coextensive with the viewable area 55. The dimensions of each screen, therefore, are “predetermined” as claimed. In addition, because the application states that “each screen” is sized in the same manner, it follows that each screen has the same dimensions of every other screen. This common dimensional aspect also is shown specifically in Fig. 3.

Second, claims 1 and 37 have been amended to recite that “the screens are arranged contiguously in predetermined locations in the application workspace such that the application workspace is a single and functionally continuous logical workspace . . .” As stated in the application, “the workspace 54 can be made up of a plurality of contiguous screens 56 (e.g. a matrix of screens) to form a continuous area upon which application content may be logically associated.” (Paragraph [0040].) This positioning of the screens also is exemplified in Fig. 3, and may take a variety of matrix forms (see

paragraph [0044]). The positioning of the screens relative to one another, therefore, is predetermined when the workspace is generated, as recited in the claims. The predetermined positioning of the screens permits a user to navigate the workspace by selecting a particular screen, such as, for example, by using a navigation box that depicts the screens configuration in a miniaturized format (see paragraphs [0057-0060 and Fig. 7], or with a drop-down menu that identifies each screen based on its position in the workspace (see paragraphs [0062-0063] and Fig. 8).

By virtue of the claimed sizing and positioning of the screens, the application workspace essentially is divided into equal and fixed units. Accordingly, although a user may alter what area of the logical workspace constitutes the viewable area within the workspace, the positioning of the viewable area is independent of the configuration (size and position) of the screens within the workspace. As further described below, the references, whether viewed individually or in combination, do not teach such features.

C. Functional Language

During the interview, the Examiner also expressed concern of an apparent lack of functional language in the claims. Applicant has clarified the functional aspect of the workspace navigation and generation tool by more explicitly incorporating the navigational aspect into the independent claims. For example, claim 1 has been amended to recite in part “code that, in response to a user input, changes the viewable work area location within in the logical application workspace.” A comparable amendment has been made to method claim 37. In other words, aspects of the claimed invention include generating the application workspace including the claimed screens, receiving a user input, and transforming the workspace by changing which area of the logical application workspace is displayed in the viewable work area. In this manner, the screens concept is employed to navigate the workspace. The claim amendments, therefore, address the Examiner’s comments regarding functional language in the claims.

II. PRIOR ART REJECTIONS

Claims 1, 2, 6-9, 12, 13, 18-24, 35-38, 42-45, 48, 49, 54-60, and 71-72 stand rejected pursuant to 35 U.S.C. § 103(a) as being obvious over Czerwinski et al., U.S. Patent Application Publication No. 2004/0066414 (Czerwinski) in view of Duffy, European Patent Application Publication No. 0 613 080 (Duffy). In addition, claims 1-5, 10, 14, 16, 17, 25-28, 37-41, 46, 50, 52, 53, and 61-64 stand rejected pursuant to 35 U.S.C. § 103(a) as being obvious over Anderson et al., U.S. Patent Application Publication No. 2003/0189597 (Anderson) in view of Duffy.

Czerwinski and Anderson were cited in the previous Office Action, and Duffy is a newly cited reference. The Examiner recognizes that neither Czerwinski nor Anderson discloses an application workspace larger than a physically viewable work area, nor the claimed configuration of the screens. The Examiner, however, states that Duffy discloses such features and concludes that it would have obvious to combine the system of Duffy with that of either Czerwinski or Anderson to arrive at the claimed invention. (See Office Action at pages 3 and 12.) Applicant disagrees and traverses the rejections for at least the following reasons.

A. Duffy Does Not Disclose the Claimed Screens Configuration

Duffy does not disclose the claimed screens as recited in amended independent claims 1 and 37. Applicant recognizes that Duffy discloses an application workspace larger than a viewable work area. For example, Duffy discloses a “virtual workspace” that constitutes a portion of the desktop which is not visible to the user at any one time. (See, e.g., Abstract of Duffy.) As purportedly disclosing the claimed screens, the Examiner cites to Duffy’s Abstract and Figs. 2-11, which are all but one of Duffy’s figures. During the interview, the Examiner clarified that he was considering workspace portions 100, 140, and 145 in the figures as the claimed screens.

Specifically, element 100 in Duffy is denoted as the “real workspace” or the viewable area. Duffy also defines a “virtual workspace” that includes extensions 140 and 145 of the workspace which is outside viewable area: “The virtual workspace constitutes that portion of the desktop which is not visible to the user at any one time.”

(Col. 3, lines 6-10.) Referring to Fig. 2 of Duffy, the total workspace includes areas 140 and 145 beyond the physically viewable portion 100. Duffy further states: "since the desktop of the present invention may be horizontally panned, the **virtual and real workspaces dynamically change**." (See Duffy at col. 6, line 51 to col. 7, line 17, emphasis added.) As such, as the viewable area (element 100) is moved, its location within the workspace changes. Commensurately, the location and/or dimensions of the virtual workspace (elements 140 and 145) also changes.

Applicant's system may have a similarity to that of Duffy in that in Applicant's system, the real (viewable) and virtual (non-viewable) portions of the total workspace may change. Applicant's system, however, generates a specific configuration of a total workspace and associated navigation features, which are not disclosed by Duffy. Specifically, in Applicant's system the total workspace is divided into specific units – the claimed screens. As described in Section I above, each screen has predetermined dimensions and is positioned at a predetermined location within the workspace. Thus, any given screen may be at times part of the viewable portion of the total workspace, and at other times be part of the virtual portion of the total workspace. Regardless of visibility, however, the predetermined dimensions of the screens, and their predetermined locations or positions in the workspace relative to one another, **does not change**. The claimed concept of screens, therefore, denotes fixed unit portions of the total workspace. **The dimensions, location, and content of a screen do not depend upon what portion of the workspace constitutes the viewable area.**

Relatedly, Applicant's system divides the workspace into screens each having a defined predetermined size. The independent claims recite that the logical screens have dimensions that are coextensive with a physically viewable work area defined by the main computer application. As stated above, Duffy discloses merely that portions of the workspace may be viewable (element 100), and portions may be virtual (elements 140 and 145). The dimensions and/or location of the respective real and virtual portions dynamically change as a user pans over the workspace.

Referring to the claim language, because of these distinctions Duffy does not disclose several features associated with the claimed screens. Specifically, Duffy does not disclose or suggest an application workspace comprising a plurality of screens in which **each of the screens** has the following features: (1) predetermined dimensions that are coextensive with the physically viewable work area defined by the main computer application; (2) dimensions that are the same as every other screen; and (3) a predetermined location in the application workspace. A comparison of Figs. 2-11 in Duffy, to Fig 3 of the current Application, clearly shows that Duffy does not teach the claimed screens, and as such, does not teach navigating around a logical workspace that is dimensioned in screen sized units. The rejections based on Duffy, therefore, should be withdrawn.

B. The References In Combination Do Not Disclose the Claimed Invention

Because of the above deficiencies of Duffy, a combination of Duffy with either Czerwinski or Anderson does not result in, disclose, or suggest the claimed invention. Czerwinski and Anderson were applied in the previous Office Action and discussed during both interviews. In summary, these references address the issue of how to manage substantial amounts of information given a workspace limited to the size of the monitor. In other words, these references are only about ways to arrange content within the viewable area as defined physically by a display monitor. Indeed, the Examiner now recognizes that neither reference discloses or suggests an application workspace larger than a viewable work area. (See Office Action at pages 3 and 12).

Czerwinski deals with managing windows within the physically viewable area or display using the operating system desktop and the taskbar. For example, Czerwinski refers to representing "graphical windows in the desktop and as a control tile in the taskbar." (Paragraph [0007].) Similarly, Czerwinski discloses representing "graphical windows in a first portion of the display and as graphic controls on a second portion of the display." (Paragraph [0008].) After disclosing these general features, the remainder of Czerwinski is geared toward disclosing various specific ways of grouping control tiles and/or representing them on the taskbar.

Similar to Czerwinski, Anderson discloses a system for displaying information within a physically viewable area limited to the size of the display monitor. Specifically, Anderson discloses displaying scaled down versions of multiple desktops on a single display screen. Each scaled down desktop is displayed as a scaled pane having dimensions proportional to, but less than, the dimensions of a non-scaled down desktop. (See, e.g., paragraphs [0008], [0034], [0037], figures 5-7.) The desktops are separate, and the panes do not combine into a continuous, logical workspace. Rather, each desktop is independent of all the others. As such, if a user were to drag an application window to the edge of one of the scaled desktops, the window would disappear from the scaled desktop in the same way as when only one full-size desktop is displayed on a monitor. The application window could not be dragged to an adjacent desktop; nor could an application window straddle two desktops. This is in contrast to the claimed invention in which applications can be moved out of the viewable area to any part of the logical workspace.

Thus, though in different ways, Czerwinski and Anderson each addresses the issue of handling large amounts of information by fitting such information more efficiently into a viewable work area. Duffy addresses the handling of large amounts of information in a different way. Rather than fitting such information into the viewable work area, Duffy discloses expanding the workspace to include a virtual workspace portion that may be panned in specific ways.

If one were to modify the systems of either Czerwinski or Anderson based on Duffy, one would merely expand the workspace of Czerwinski or Anderson to include virtual components (and perhaps the associated panning aspects). In any event, the combinations with Duffy would not alter the display management features or operation of either the system of Czerwinski or Anderson. Certainly, such combinations would not result in, disclose, or suggest a workspace configured with the claimed screens.

C. Additional Generation and Navigation Concepts

From the basic concept of the claimed screens, additional workspace generation and navigation features have been developed. Various such features are recited in the

dependent claims. For example, the number of screens, and thus the dimensions of the workspace, may be expanded by virtue of a user action. In other words, because each screen has predetermined dimensions the same as those of every other screen, the workspace may be readily expanded or contracted in "screen" sized units or increments. For example, in one embodiment, the number of screens and workspace dimensions may be altered by user movement of a sub-application window. If a sub-application window is dragged or otherwise moved beyond the current dimensions of the workspace, the number of screens and workspace dimensions expand. (See, e.g., Application at paragraphs [0050-0054] and figure 4.) Various manipulations of the workspace dimensions in screen sized increments are recited, for example, in computer-readable medium claims 3, 4, 16, and 17, and in corresponding method claims 39, 40, 52, and 53.

The claimed screens concept also has led to the development of various navigation features. For example, because each screen has a predetermined location in the workspace, navigation may be based on the selection of a given screen followed by navigation to or selection of another screen position anywhere in the workplace. One such exemplary navigation mechanism is the navigation box 84. The navigation box 84 (figure 7) represents a miniaturized iconic version of the logical application workspace 54, including miniaturized iconic representations of the plurality of screens 56. Such a representation is possible because of the predetermined dimensions and location of each screen. Each sub-application window 58 may also be represented in the navigation box in a miniaturized iconic, text, or similar form. The navigation box may be used for a variety of navigation operations including, for example, selecting a screen to view, selecting a sub-application to view, moving sub-applications around the workspace or among the screens, and others. The navigation mechanisms may also include drop down menus for performing comparable operations based on the identification and selection of any given screen based on its position in the workspace. (See, e.g., Application at paragraphs [0058-0066] and figures 6-8.) Various navigation mechanisms are recited, for example, in computer-readable medium claims 18-25 and in corresponding method claims 54-61.

As demonstrated above, the basic concept of the claimed screens recited in independent claims 1 and 37 is patentable. The additional workspace generation and navigation features, which are based upon the basic screens configuration, are therefore patentable for at least the same reasons.

III. CONCLUSION

In light of the foregoing, claims 1-10, 12-14, 16-28, 35-46, 48-50, 52-64, and 71-72 recite patentable subject matter. Accordingly, it is respectfully submitted that the present application is in condition for allowance and notice to that effect is hereby requested. If the application is not in condition for allowance, the Examiner is invited to contact the undersigned representative by telephone to resolve any outstanding issues.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988, reference number CUTCP0103US.

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

By /MDavidGalin/
M. David Galin; Reg. No. 41,767

1621 Euclid Avenue
Nineteenth Floor
Cleveland, Ohio 44115
Telephone: (216) 621-1113
Facsimile: (216) 621-6165